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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,300	01/25/2001	Jar J. Lee	PD-99W059	9203

7590 07/31/2002  
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EXAMINER

BLUM, THEODORE M

ART UNIT PAPER NUMBER

3662

DATE MAILED: 07/31/2002

#7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/771300

Applicant(s)

LEE ET AL

Examiner

T. BLUM

Group Art Unit

3662

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 6 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 3-28-02
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 2-5, 7-20 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 2-5, 7-20 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The proposed drawing correction, filed on 3-28-02 is ☒ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

**THIS DOCUMENT CONTAINS INFORMATION UNDER  
SECURITY ORDER, as defined in E.O. 11652,  
Unauthorized disclosures subject to the  
and Criminal Penalties.**

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

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1. The drawing corrections March 28, 2002 have been approved by the Examiner.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

3. (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.
4. Claims 2-5,9,10, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sievenpiper et al, newly cited.

Sievenpiper et al teaches the claimed conformal end-fire antenna (column 1, lines 50-55) including: high impedance ground surface structure (14, 73, column 1, lines 50-55, column 5, lines 10-16, figures 1a, 5, and 6) and flared notch antenna (53, column 3, lines 26-67).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 8 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sievenpiper et al in view of Hannan, both newly cited.
7. Hannan teaches the claimed conformal end-fire antenna for mounting on a nose cone of an aerial vehicle (column 1, lines 5-9) including the use of end-fire antennas (column 3, line 65) and delay means (figures 1-8 and column 4, line 5).

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To use wide band signals, obviously the flared notch end-fire antennas of Sievenpiper et al can be used on the nose of an aircraft as taught by Hannan (column 1, lines 5-9)

8. The Diaz et al patent is cited to show end-fire antennas (column 6, line 23), ground plane (abstract) and flared notch antennas (figures 1-5)

9. Any inquiry concerning this communication should be directed to Theodore Blum at telephone number (703) 305-1833.

  
THEODORE M. BLUM  
PRIMARY EXAMINER

blum/jcs  
07-16-02